ABSTRACT

Featured is a method for reducing the contention of the highly contended global lock(s) of an operating system, hereinafter dispatcher lock(s) that protects all dispatching structures. Such a method reduces the need for acquiring the global lock for many event notification tasks by introducing local locks for event notifications that occur frequently among well defined, or consistent dispatcher objects. For these frequently occurring event notifications a subset of the dispatching structure is locked thereby providing mutual exclusivity for the subset and allowing concurrent dispatching for one or more of other data structure subsets. The method also includes acquiring one or more local locks where the level of protection of the data structure requires locking of a plurality or more of data structures to provide mutual exclusivity. The method further includes acquiring all local locks and/ or acquiring a global lock of the system wide dispatcher data structures wherever a system wide lock is required to provide mutual exclusivity.